

POINT-TO-POINT PROTOCOL OVER
ETHERNET FOR MOBILE PLATFORMS

ABSTRACT OF THE DISCLOSURE

A communications system that provides broadband access to passengers of mobile platforms includes a router located on the mobile platform. A network is connected to the router. User communication devices (UCDs) connected to the network, wherein the UCDs establish point-to-point over Ethernet (PPPoE) sessions with the router. A transmitter and a receiver are connected to the router. A satellite and a ground station are in communication with the transmitter and the receiver. A distributed communications system includes virtual private networks (VPN) and is connected to the ground station. A first address manager leases the use of public IP addresses by the mobile platform. A second address manager assigns the public IP addresses to UCDs when the UCDs request access to the VPNs and private IP addresses for other network service. The UCDs employ IPSec protocol when accessing the VPNs.